



Bank of Russia



2021 H1 REPORT ON THE RUONIA OVERSIGHT COMMITTEE'S ACTIVITY

Moscow
2021

CONTENTS

Preface	2
I. RUONIA Oversight Committee	3
II. Activity of the Committee	4
Development of RUONIA term values.....	4
Forming the RUONIA list.....	5
RUONIA fallback value in May 2021	6
RUONIA trademark assignment	7
Public disclosures.....	7
Plans for 2021.....	7
III. Review of RUONIA in 2021 H1.....	8
RUONIA as an IBL market benchmark.....	8
RUONIA in financial instruments	10
Detailed information on parameters for RUONIA calculation	11
Summary on errors in reporting affecting the published RUONIA value and on RUONIA Fallback Value calculation	12
Glossary	13

This publication was prepared by the Executive Office and the Statistics Department of the Bank of Russia.

Cover photo: Shutterstock / FOTODOM

12 Neglinnaya Street, 107016 Moscow

Bank of Russia website: www.cbr.ru

© Central Bank of the Russian Federation 2021

PREFACE

This Report by the RUONIA Oversight Committee of the Bank of Russia (hereinafter, the Report) provides a review of the RUONIA administration over the period from January through June 2021. As a draft public document shall be approved by the RUONIA Oversight Committee, the Report is released no earlier than one month after the end of the period under review. Information on the RUONIA administration is also available in the section [RUONIA](#) on the Bank of Russia website.

The terms in bold are defined in the Glossary.

Please send your feedback on the content or structure of the Report through the [inquiries](#) about RUONIA on the Bank of Russia website.

I. RUONIA OVERSIGHT COMMITTEE

Ruble OverNight Index Average (RUONIA) is the weighted average interest rate on overnight interbank ruble loans (deposits) reflecting the cost of unsecured overnight borrowing. The up-to-date version of the methodology for producing and publishing RUONIA (Ruble Overnight Index Average) (hereinafter, the Methodology), effective from 23 December 2020, is [available](#) on the Bank of Russia website.

RUONIA is a risk-free **benchmark** used to monitor and analyse the efficiency of pursuing the operational objective of the Bank of Russia's monetary policy. RUONIA is a benchmark rate used in the pricing of a number of financial instruments, including loans, bonds, and derivatives.

The Bank of Russia is the **administrator** of RUONIA and is in charge of all the stages of its administration, including the Methodology, forming the **RUONIA list**, data collection, the calculation and publication of the interest rate benchmark.

On 22 June 2020, the Bank of Russia established the RUONIA Oversight Committee (hereinafter, the Committee). The Committee oversees the RUONIA administration in terms of its compliance with the [Principles for Financial Benchmarks of the International Organization of Securities Commissions \(IOSCO\)](#).

The Committee's tasks are as follows:

- **oversight** over the RUONIA administration process;
- coordination of the documents and procedures related to the RUONIA administration;
- communication with RUONIA users and other stakeholders, including the Expert Council on Benchmarks and Rates of SRO National Finance Association.

The Regulation on the RUONIA Oversight Committee is [available](#) on the Bank of Russia website.

Members of the Committee as of 1 July 2021:

Ksenia Yudaeva, First Deputy Governor of the Bank of Russia, Chairperson of the Committee;

Nadezhda Ivanova, Adviser to First Deputy Governor of the Bank of Russia;

Sergey Moiseev, Adviser to First Deputy Governor of the Bank of Russia;

Irina Melnikova, Deputy Director of the Financial Market Strategy Department – Chief of the Division for Strategic Initiatives in the Financial Market;

Roman Mukhlynov, Deputy Director of the Department for Countering Misconduct – Chief of the Division for the Regulation of Countering Misconduct;

Ivan Shevchuk, Chief of the Division for Managing Financial Market Risks and Stress Testing at the Financial Stability Department;

Vasily Zablotsky, President of Self-regulatory organization National Finance Association (as agreed);

Oleg Gorlinskiy, representative of Self-regulatory organization National Finance Association (as agreed).

The Committee's Executive Secretary is Elena Ershova, Deputy Chief of the Division for Lending and Interest Rates Statistics and Statistics Communication at the Statistics Department.

The Committee held three meetings over the first half of 2021.

To ensure the transparency of the RUONIA administration, maintain its high standards, and assure the financial market participants using RUONIA in financial instrument pricing of the reliability and high quality of RUONIA and compliance with the international standards, the Bank of Russia releases the Report on the Committee's activity. In accordance with the Regulation on the Committee, the Bank of Russia publishes the Report on the Committee's activity every six months on the Bank of Russia website.

II. ACTIVITY OF THE COMMITTEE

Development of RUONIA term values

The RUONIA **administration** model was changed within the global reform of interest rate **benchmarks** that set new objectives for central banks and the financial community. Former interest rate benchmarks, such as LIBOR, were term rates, whereas new risk-free benchmarks are only calculated for overnight funding. Central banks take efforts to create an interest rate curve based on risk-free benchmarks. In 2020, the US Fed launched SOFR Averages with tenors of up to 180-calendar days calculated on a compounded basis. The European Central Bank announced similar plans to construct the €STR interest rate curve. The Bank of England began publishing the daily SONIA Compounded Index to enable market participants to calculate on their own the compounded SONIA rate for any reference period.

The global financial system is actually developing a new pricing standard, pursuant to which term values of risk-free benchmarks are calculated daily as compounded rates based on overnight rates (see the Table). This is called a backward-looking approach as it is based on interest rates for a previous period. An alternative forward-looking approach constructs term interest rate benchmarks based on data on interest rate swaps and interest rate futures contracts. However, as the market of derivatives based on the new risk-free benchmarks is not sufficiently mature, the forward-looking approach is purely theoretical today.

The Bank of Russia made the decision to join the global standard on term values of interest rate benchmarks and developed two products: *RUONIA term values* calculated for one, three and six months, and the *RUONIA Compounded Index*. They may be used by market participants on their own to calculate interest rates for any (non-standard) reference periods. Interest for both products is calculated as compound interest on business days and as simple interest on weekends and holidays when financial markets do not operate. The Bank of Russia plans to publish both RUONIA values calculated for one, three and six months and the RUONIA Compounded Index.

The Committee considered suggestions on RUONIA term values and decided to:

- publish methodological proposals on calculating RUONIA term values;
- hold working meetings with the largest issuers to discuss the use of RUONIA term values in bond loans at floating interest rates;
- release the consultation paper 'On selecting the main interest rate benchmark in the Russian financial market'; and
- carry out internal and external consultations on the convention for applying RUONIA term values in financial products, including at the meeting of the Bank of Russia's Working Group for the analysis and development of the methodology for calculating interest rates in various segments of the financial market, with the engagement of financial market participants' representatives to be invited.

TERM VALUES OF FOREIGN INTEREST RATE BENCHMARKS BASED ON DATA FOR THE PREVIOUS PERIOD, AS OF JUNE 2021

Benchmark	Administrator	Term values	Year of publication
SOFR	US Fed	30, 90 and 180 days	2020
€STR	ECB	1 week, 1 month, 3 months, 6 months, 12 months	2021
SONIA	Bank of England	daily compounded index	2020
TONAR	Bank of Japan	under development	2021
CORRA	Bank of Canada	daily compounded index	2021
SWESTR	Riksbank	under development	2021

Sources: foreign central banks.

Consultations on using RUONIA term values are expected to complete in 2021 H2.

As compared to such alternatives as the Bank of Russia key rate and the averaged value of RUONIA applied in variable coupon-income federal government bonds (OFZ-PK), the proposed methodological solution provides a range of benefits to issuers and investors. First, this is total transparency as the benchmark is to be published on business days and calculated for every day, thus providing the opportunity to calculate coupon yield accrued for any period. Second, the compound interest algorithm helps smooth out yield fluctuations and avoid shocks of the Bank of Russia key rate. The third benefit is the economic sense as final yield is measured based on the results of overnight reinvestment. Fourth, this mitigates basis risk as the pricing of assets based on RUONIA term values will be highly correlated with similar conditions in the interbank liabilities market.

Today, the Russian financial market has a variety of alternative interest rate benchmarks, which causes market fragmentation and basis risk as assets and liabilities pricing and interest rate hedging rely on different benchmarks. The Bank of Russia considers the possibility of moving towards uniform principles in the pricing of the financial sector's assets and liabilities at floating interest rates. It is assumed that pricing may be based on the RUONIA interest rate curve compliant with the international standards. In the future, the development of credit, bond and derivatives markets based on RUONIA term values might address the problem of transfer pricing in the financial sector without basis risk.

Forming the RUONIA list

The Bank of Russia reviews the **RUONIA list** at least every six months to ensure that the benchmark is representative. Based on the analysis of the structure of the interbank market, the Bank of Russia may decide to update the list or keep it unchanged. Before the RUONIA **administration** was assigned to the Bank of Russia in 2020, the list of the RUONIA panel banks was compiled based on a reasoned opinion. To ensure the transparency, objectivity, and a coordinated timing, the Committee made the decision to establish an official procedure for revising the RUONIA list based on the algorithm for selecting credit institutions.

The Committee considered a new procedure for selecting credit institutions relying on the following measures:

- a panel bank's activity level: the average daily number of RUONIA panel banks with whom a particular credit institution transacted over the period under review;
- market turnover: the amount of transactions with RUONIA panel banks over the period under review;
- closeness to the core of the interbank market: eigenvector centrality of each RUONIA panel bank; and
- consistent credit quality: a RUONIA panel bank's credit rating.

To compile the RUONIA list, the Bank of Russia applies an automated algorithm for pairwise comparison of market participants by the four measures. Based on the results of data processing, the Bank of Russia generates a ranked list to sort market participants in descending order of compliance with the four measures. The Committee makes its final decision to approve the RUONIA list based on a professional opinion.

The approach to the official procedure for compiling the RUONIA list was discussed with financial market participants. The key focus of the discussion was the degree of complexity of the algorithm for addressing the objective set and the problem when some foreign subsidiary banks lack a credit rating. As regards the first issue, alternative algorithms were discussed, yet they did not find adequate support in the expert community. As to the second issue, the solution implied that a foreign subsidiary bank's credit rating should be deemed to be equal to 'AAA' according to the national scale, provided that its parent bank's credit rating was above the sovereign rating of the Russian Federation according to the international scale. Empirical analysis shows that where

a foreign subsidiary bank has a lower credit rating, it is generally not an active participant in the interbank market.

The updated procedure for selecting credit institutions in the course of the revision of the RUONIA list was discussed at the Committee's meeting and was approved for subsequent application. At the beginning of 2021 H2, the RUONIA list is expected to be revised according to the updated procedure.

RUONIA fallback value in May 2021

The Committee's remit encompasses monitoring of critical situations, including analysis of operational risks, reasons for errors and lack of data, and incidents of a benchmark value review. The essential aspects of the RUONIA administration are the continuity of the benchmark calculation and publication. In the case of any incidents, this continuity is secured by the RUONIA **Fallback Value**. According to the Methodology, a fallback value is calculated when at least one of the following conditions is relevant:

- market participants raising or offering interbank loans number less than three;
- the share of loans raised or offered by one market participant exceeds 75% of the overall amount of transactions;
- data of over 50% of market participants are not available;
- there is no technical capacity to calculate RUONIA.

A fallback value is calculated as the weighted average of RUONIA for the previous date and the weighted average of RUONIA calculated based on data for the current date. Weights in the calculation are the respective amounts of transactions for each of the dates. If reporting data for the calculation date are unavailable or the previous published value was a fallback one, a fallback value is deemed to be equal to RUONIA for the previous date. If the conditions triggering the calculation of a fallback value occur repeatedly, the benchmark value does not change remaining equal to the value as of the beginning of the first calculation of a fallback value. If a critical situation persists for more than three days, the Committee should consider the issue of further actions.

Over the period from 14 to 18 May 2021, the Bank of Russia calculated a fallback value of RUONIA due to temporary structural changes in the interbank market. A major market participant's transactions made over 75% of the overall amount of transactions taken into account to calculate RUONIA. The situation continued for several consecutive days and triggered the calculation of a fallback value of the benchmark. The concentration of interbank transactions was up due to an increase in the amounts of one of the market participants, but its transactions were conducted at interest rates close to other market participants' rates. Hence, the calculated fallback value did not have a statistically significant deviation from the value calculated according to the standard procedure.

As further developments were uncertain and there was a risk that the situation could occur repeatedly, the Committee held an unscheduled meeting and made the decision that the criterion of concentration should not be applied temporarily until the end of 2021. The adjusted algorithm for calculating the Fallback Value became effective on 20 May based on data as of 19 May 2021. This made it possible to factor in the observed market changes, which is in line with the IOSCO Principles for Financial Benchmarks that the Bank of Russia committed to. The information about this decision was published in a press release dated 20 May 2021. Furthermore, the Committee gave a task to prepare proposals on how the concentration criterion should be applied further on. Overall, this decision enabled the Committee to promptly respond to the market developments and preserve the representation of the RUONIA benchmark amid instantaneous structural changes in the interbank market.

RUONIA trademark assignment

In 2020, the Bank of Russia made the decision to arrange an external audit of the RUONIA administration to receive an independent confirmation of the proper organisation of the benchmark administration and assure RUONIA users of the high quality of the benchmark administration. The international audit was carried out by Ernst & Young LLC which provided, among other findings, the assessment of potential risks and operational problems related to the fact that the Bank of Russia did not have the right to the RUONIA trademark. The auditor recommended that the rights to the RUONIA trademark should be assigned from SRO National Finance Association to the Bank of Russia: according to the international practice, when the benchmark administration was transferred to central banks, they also received the rights to the trademarks, and the absence of the said rights involved legal and reputational risks for the Bank of Russia.

The Bank of Russia received several proposals from SRO National Finance Association. Having considered them, the Committee recommended a one-time acquisition of the trademark. On 30 April 2021, SRO National Finance Association and the Bank of Russia signed the agreement on the alienation of the exclusive right to the trademark. The Committee also made the decision to engage a patent attorney to register the transfer of the exclusive right to the trademark with the federal executive agency for intellectual property. The Bank of Russia plans to register the trademark in its name by the end of 2021.

After the assignment of the trademark is completed, the Bank of Russia does not plan to commercialise the RUONIA administration as this would contradict Article 3 of the Federal Law 'On the Central Bank of the Russian Federation (Bank of Russia)' (profit generation is not a goal of the Bank of Russia's activities). The Bank of Russia provides all information products free of charge to all financial market participants as a public good.

Public disclosures

In 2021 H1, the Committee released the first [Report](#) on its activity. According to the Regulation on the Committee, the collegial body reviews reports made by the Bank of Russia's structural units responsible for data preparation and RUONIA calculation and publication, as well as compiles and releases its report on the Bank of Russia website every six months. The first Report of the Committee covered the issues of the organisation of the benchmark administration at the Bank of Russia, methodological work on the benchmark, and international audit findings. To provide comprehensive information to foreign investors, the Report was translated into English and is available in the English version of the Bank of Russia website. Furthermore, the Bank of Russia is considering the possibility of releasing regular information on the use of RUONIA in financial markets on the Bank of Russia website.

Plans for 2021

Until the end of 2021, the Committee plans to:

- register the Bank of Russia's rights to the RUONIA trademark;
- update the RUONIA list in accordance with the revised procedure for selecting credit institutions to compile the RUONIA list;
- address the methodological issue of ensuring the continuity of the RUONIA calculation in the conditions of significant market concentration; and
- carry out public consultations regarding the use of RUONIA term values.

III. REVIEW OF RUONIA IN 2021 H1

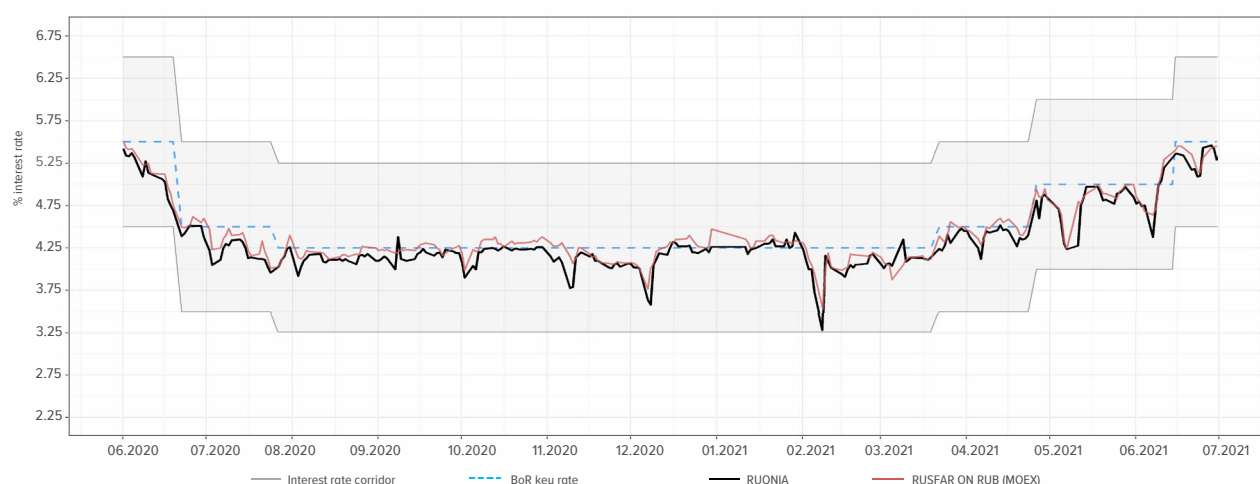
RUONIA as an IBL market benchmark

In 2021 H1, according to the decisions of the Bank of Russia Board of Directors, the Bank of Russia key rate was steadily increased three times. The analysis of the RUONIA values over this period shows that the benchmark level adjusted fairly quickly to the new level of the sideways trend in the money market. RUONIA movements were generally consistent with changes in RUSFAR, another indicator of the cost of overnight borrowing (Chart 1).

RUONIA movements in 2021 H1 are representative of the demand and supply in the interbank market. Overall, the amount of transactions in 2021 hovered around the average level of 134 billion rubles (Chart 2), which is 3% more than in 2020 H2.

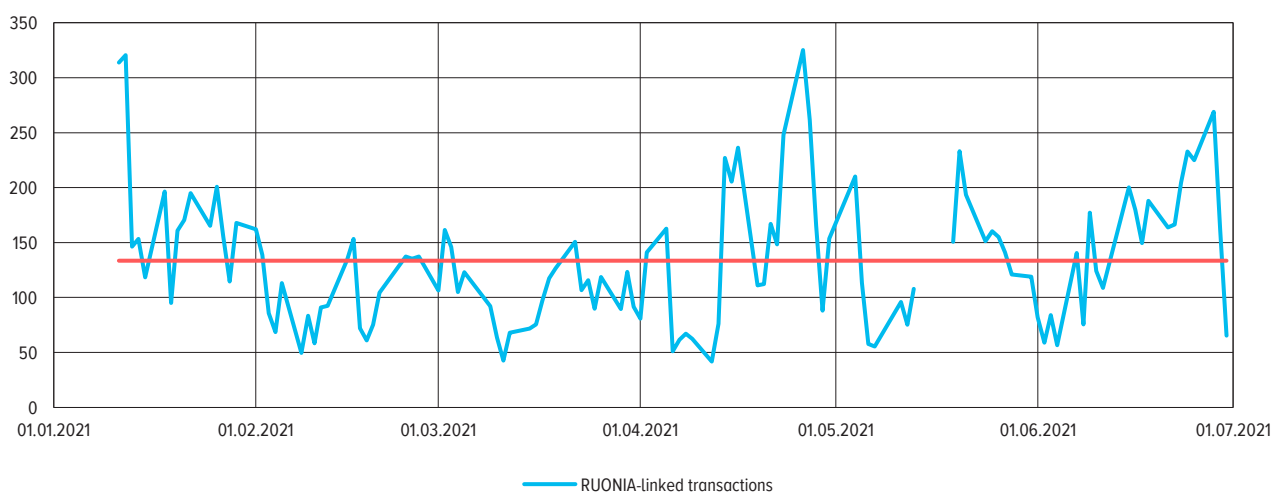
MOVEMENTS OF RUONIA, INTEREST RATE CORRIDOR, AND RUSFAR (%)

Chart 1

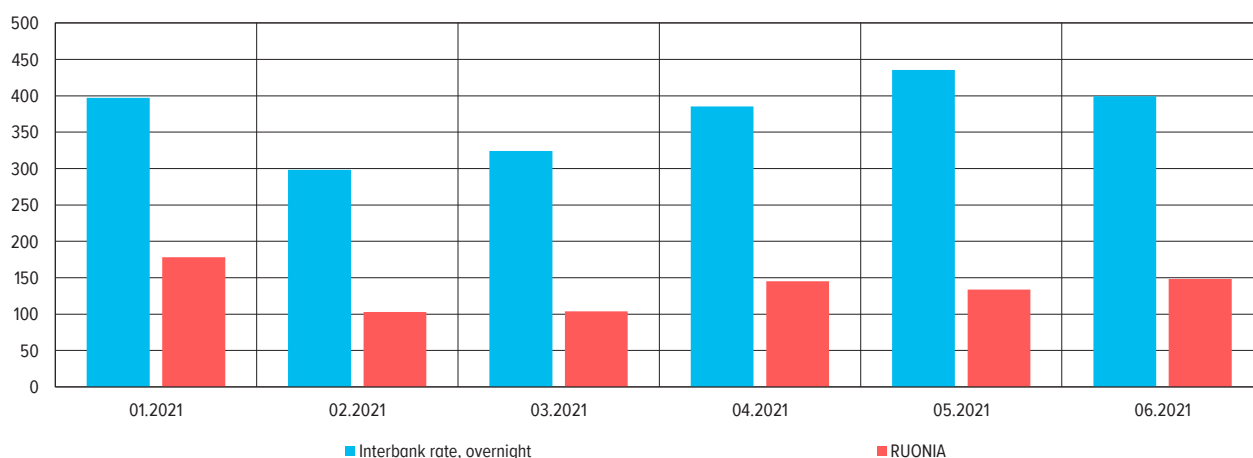


RUONIA VOLUMES IN 2021
(BILLIONS OF RUBLES)

Chart 2

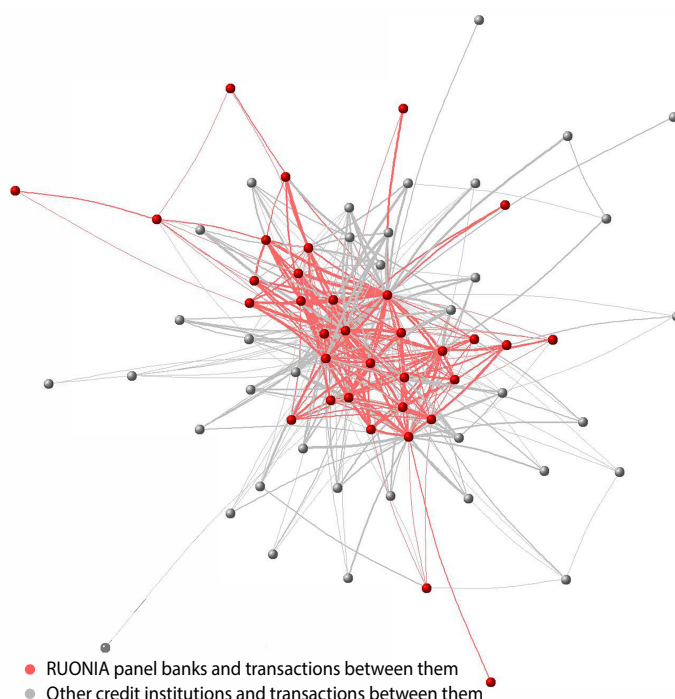


AVERAGE DAILY TURNOVER OF RUBLE-DENOMINATED OVERNIGHT INTERBANK LOANS WITH RESIDENTS AND AVERAGE DAILY RUONIA VOLUME* IN 2021 (BILLIONS OF RUBLES) Chart 3



* The average daily volume of RUONIA is calculated as a total of RUONIA volumes over a month divided by the number of the days of publication over the month.

NETWORK STRUCTURE OF TRANSACTIONS IN THE OVERNIGHT IBL MARKET OVER 2021 H1 Chart 4



The RUONIA volume accounted for a considerable portion of the average daily turnover of the overnight interbank lending market¹ (over 36%), which is due to the level of activity of the RUONIA panel banks in the market (Chart 3).

The diagram of the network structure (Chart 4) shows that the RUONIA panel banks' transactions represented the transactions of the core of overnight IBL.

¹ The average daily turnover of the overnight interbank lending market comprises transactions between resident credit institutions, including transactions with credit institutions not authorised by the Bank of Russia to submit reporting according to Form 0409701 'Report on Transactions in Foreign Exchange and Money Markets' provided for by Bank of Russia Ordinance No. 4927-U, dated 8 October 2018, 'On the List, Forms and Procedure for Compiling and Submitting Credit Institutions' Reporting Forms to the Central Bank of the Russian Federation' (hereinafter, Ordinance No. 4927-U) and transactions between credit institutions being part of the same banking group according to the information submitted in Form 0409801 'Report on Member Entities of a Banking Group and Investments of a Credit Institution in Unit Investment Funds' Units' provided for by Ordinance No. 4927-U.

PORTION OF THE PANEL BANKS WHO CONDUCTED TRANSACTIONS IN THE TOTAL NUMBER OF THE RUONIA PANEL BANKS IN 2021

Chart 5

(%)

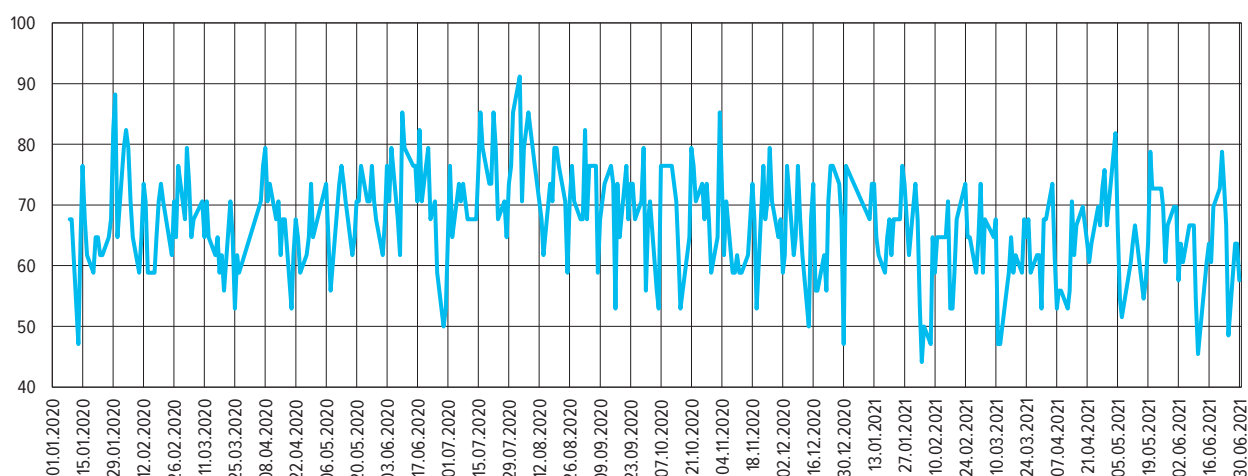


Chart 5 shows the portion of the RUONIA panel banks who conducted transactions taken into account in the RUONIA calculation in the total number of the RUONIA panel banks. Over 2021 H1, more than two-thirds of the credit institutions put on the RUONIA list conducted transactions between each other in the overnight ruble IBL market, which, along with the above factors, confirms that the transactions carried out by the RUONIA panel banks are sufficiently representative of the market measured.

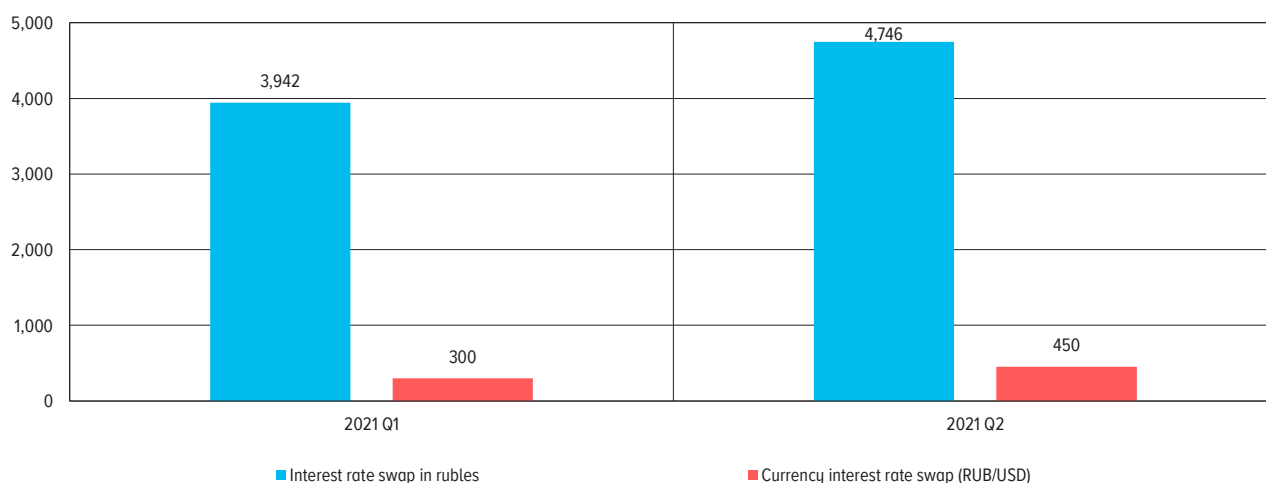
RUONIA in financial instruments

2021 H1 demonstrated a trend towards an expanded use of RUONIA in both interest rate swaps and currency interest rate swaps, which proved that market participants were more interested in the benchmark (Chart 6).

In 2021 H1, market participants continued to steadily apply the three main floating rates in ruble-denominated interest rate swaps – MosPrime, RUONIA, and the Bank of Russia key rate. The portion of transactions linked to the key rate contracted significantly over the period from March to May,

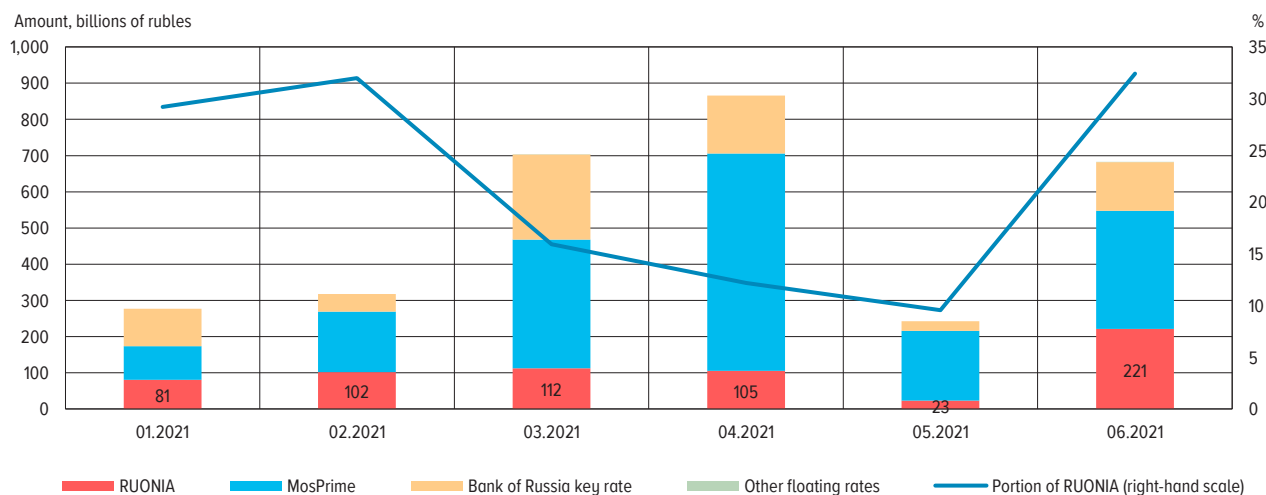
TURNOVER OF OTC DERIVATIVES USING RUONIA, BY CURRENCY, IN 2021 Q1–Q2
(MILLIONS OF US DOLLARS)

Chart 6



COMPARISON OF THE USE OF RUONIA AND OTHER FLOATING RATES IN RUBLE INTEREST RATE SWAPS IN THE SAME CURRENCY

Chart 7



resuming growth only in June. In June, transactions using the key rate accounted for 20%, which is below a 37% peak achieved in January 2021.

Over the period from February to May, the share of transactions using MosPrime expanded, while that of RUONIA-linked transactions declined. The largest portion of RUONIA-linked transactions was recorded in June when the amount of RUONIA-linked interest rate swaps was only below the amount of MosPrime-based transactions.

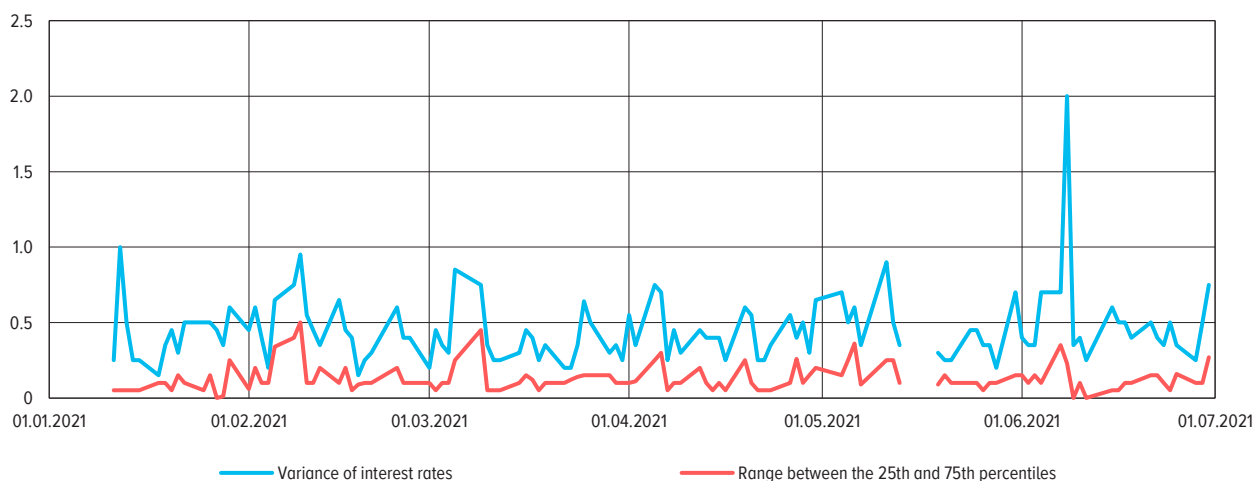
Detailed information on parameters for RUONIA calculation

As the Bank of Russia has expanded the list of information to be published within the transition to the updated Methodology, this makes it possible to analyse the parameters of the transactions used to calculate RUONIA in greater detail.

The information published on the Bank of Russia website now includes the values of percentiles and the variance of interest rates in RUONIA-linked transactions, the number of the RUONIA panel banks who conducted transactions over the day of the calculation, the number of transactions used to calculate RUONIA, as well as the status of the calculation (the standard procedure or a fallback value).

VARIANCE OF INTEREST RATES AND OF THE RANGE BETWEEN THE 75TH AND 25TH PERCENTILES OF THE RUONIA PANEL BANKS OVER 2021 H1

Chart 8



NUMBER AND AMOUNTS OF THE RUONIA PANEL BANKS' TRANSACTIONS OVER 2021 H1

Chart 9

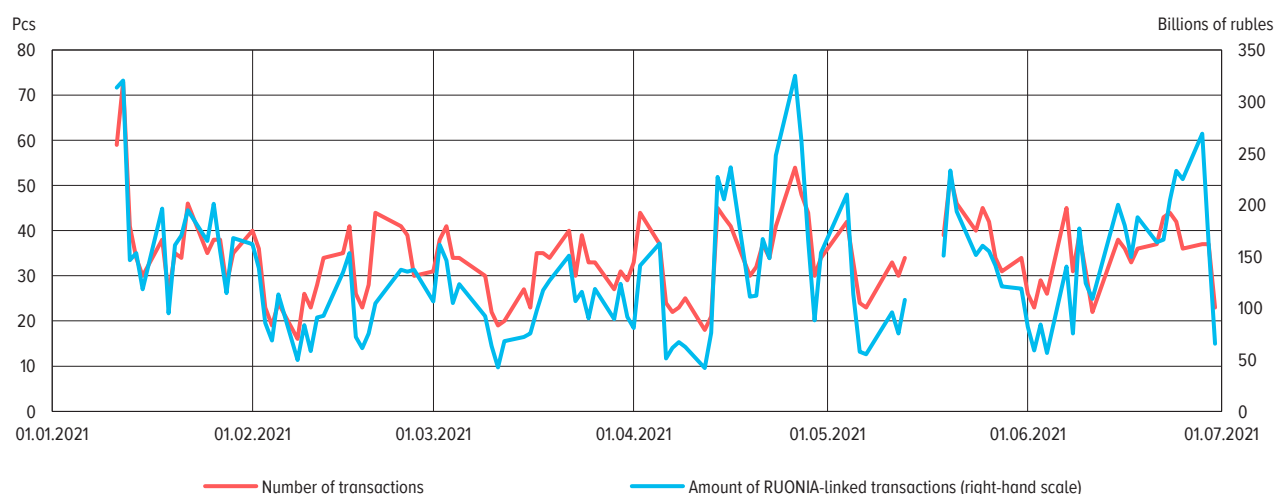


Chart 9 shows changes in the variance and the range between the 75th and the 25th percentiles of the RUONIA panel banks. The coefficient of correlation between these indicators is 0.52. The variance of interest rates increased significantly by over 100 basis points only once in June.

Chart 9 shows changes in the number and amounts of the RUONIA panel banks' transactions over 2021 H1. The data published statistically confirm the correlation between these two indicators: the coefficient of their correlation is sufficiently high, equalling 0.86. Based on the data provided, it is possible to conclude that transactions of similar amounts prevail in the transactions concluded between the RUONIA panel banks and that a rise in the amount is often achieved through an increase in the number of conducted transactions.

The average amount of a transaction was up by 10% in Q2, as compared to 2021 Q1, reaching 4.11 billion rubles.

Furthermore, there was an increase in the averages of both the amounts and the number of transactions concluded in 2021 Q2.

Summary on errors in reporting affecting the published RUONIA value and on RUONIA Fallback Value calculation

The calculation of RUONIA covering unmatched transactions in the 2021 H1 benchmark calculation base was made during three days, including one day in 2021 Q1 and two days in 2021 Q2. However, the said unmatched transactions did not affect the benchmark value and volume on two of these three days; on one of these days, the difference between the interest rates based on complete and incomplete data did not exceed two basis points. These results prove that the updated Methodology offers the optimal approach to recording unmatched transactions.

Over 2021 H1, there were three cases when a fallback value was calculated. These were triggered by the situation when a credit institution exceeded the concentration threshold of 75% total amount of borrowing or lending transactions. On the first day of the triggering event, the fallback value was calculated according to Clause 4.2 of the Methodology based on data for both the current and previous days. On the next two days, the threshold of concentration was still exceeded, and the benchmark was deemed to be equal to the previous value pursuant to Clause 4.3 of the Methodology.

According to Clause 4.4 of the Methodology, as the factors triggering the RUONIA Fallback Value calculation persisted for over three days, the issue regarding further actions related to the RUONIA calculation and publication, including, possibly, the need to revise the Methodology, was considered by the Committee, and its decision is given in the Clause **'RUONIA fallback value in May 2021'** hereof.

GLOSSARY

Ruble OverNight Index Average (RUONIA) – an interest rate benchmark which is the weighted average interest rate on unsecured overnight ruble lending transactions carried out between the credit institutions put on the RUONIA list.

Administrator – the organisation responsible for the benchmark administration.

Administration – the set of functions for developing and communicating the benchmark, including the definition of the benchmark, elaboration of its methodology, collection and processing of source data, and calculation and communication (publication) of the benchmark.

Benchmark – an aggregated indicator in the form of an index, interest rate, or exchange rate enabling the analysis of changes in the value of underlying assets over time and the assessment of the situation in the market of underlying assets both as a whole and of its individual segments.

RUONIA Oversight Committee (Committee) – the Bank of Russia's collegial body responsible for overseeing the RUONIA administration process to be performed in compliance with the IOSCO Principles for Financial Benchmarks).

IBL – interbank lending.

Oversight – one of the functions of the administrator who should control the revision and change of important administration processes, including the intended, expected, or known use of the benchmark, as well as any significant actual or potential conflict of interest.

RUONIA Fallback Value – a RUONIA value calculated to ensure the continuity of the calculation of this benchmark where it cannot be calculated according to the standard procedure.

RUONIA list – the list of Russian credit institutions whose transactions are used to calculate RUONIA; this list is approved by the Bank of Russia according to the established procedure.

RUONIA Panel Bank – a credit institution put on the RUONIA list.